

WHAT IS CLAIMED IS:

1. A process for removing water from a lipophilic fluid and water emulsion, said process comprising the step of exposing said emulsion to an absorbent matrix comprising an absorbent material in order to effect the removal of said water from said lipophilic fluid and water emulsion such that the lipophilic fluid is recovered as collected lipophilic fluid.
2. A process according to Claim 1 further comprising the steps of exposing a fabric to a lipophilic fluid and water and recovering said lipophilic fluid and said water in the form of said lipophilic fluid and water emulsion.
3. A process according to Claim 1 wherein said absorbent material comprises a polymer selected from the group consisting of surface cross-linked polyacrylate, surface cross-linked polyacrylamide, and combinations thereof.
4. A process according to Claim 1 wherein said absorbent matrix comprises a spacer material in an amount from at least about 1% to at most about 50% by volume of the dry bulk matrix and is selected from the group consisting essentially of sand, silica, aluminosilicates, glass microspheres, clay, layered silicates, wood, natural textile materials, synthetic textile materials, alumina, aluminum oxide, aluminum silicate, zinc oxide, molecular sieves, zeolites, activated carbon, diatomaceous earth, hydrated silica, mica, microcrystalline cellulose, montmorillonite, peach pit powder, pecan shell powder, talc, tin oxide, titanium dioxide, walnut shell powder, particles of different metals or metal alloys, and combinations thereof.
5. A process according to Claim 4 wherein said spacer material is selected from the group consisting essentially of particles made from polybutylene,

polyethylene, polyisobutylene, polymethylstyrene, polypropylene, polystyrene, polyurethane, nylon, teflon, and combinations thereof.

6. A process according to Claim 1 wherein said absorbent matrix comprises a high surface area material in an amount from at least about 1% to at most about 50% by volume of the dry bulk matrix.
7. A process according to Claim 1 wherein said absorbent material has a morphology selected from the group consisting essentially of fibrous morphology, particulate morphology, and combinations thereof.
8. A process according to Claim 1 wherein said absorbent matrix is in a form selected from the group consisting of a porous woven sheet impregnated with absorbent materials, a film or membrane, and combinations thereof.
9. A process according to Claim 1 further comprising the step of passing said lipophilic fluid and water emulsion through a particulate matter filter such that particles and particle aggregates about 1 micron or larger are removed.
10. A process according to Claim 1 further comprising the step of exposing said lipophilic fluid and water emulsion to activated carbon.
11. A process according to Claim 1 further comprising the step of triggering said absorbent material to release said removed water by exposing said absorbent material to a trigger mechanism selected from the group consisting essentially of light, pH, temperature, sound, electric field, pressure, ionic strength, vibration, and combinations thereof.

12. A process according to Claim 1 wherein the temperature of said lipophilic fluid and water emulsion is at least about 10°C and at most about 50°C prior to exposing said emulsion to said absorbent material.
13. A process according to Claim 1 further comprising the step of exposing said collected lipophilic fluid to activated carbon.
14. A process according to Claim 1 further comprising the step of exposing said removed water to activated carbon.
15. A process according to Claim 1 wherein said lipophilic fluid and water emulsion comprises up to about 10% emulsifier by weight of the emulsion.
16. A process according to Claim 1 wherein said lipophilic fluid comprises a linear siloxane, a cyclic siloxane, or mixtures thereof.
17. A process according to Claim 1 wherein said lipophilic fluid comprises decamethylcyclopentasiloxane.
18. A process according to Claim 1 wherein said lipophilic fluid and water emulsion also comprises adjunct ingredients selected from the group consisting essentially of enzymes, bleaches, surfactants, fabric softeners, perfumes, antibacterial agents, antistatic agents, brighteners, dye fixatives, dye abrasion inhibitors, anti-croaking agents, wrinkle reduction agents, wrinkle resistance agents, soil release polymers, sunscreen agents, anti-fade agents, builders, sudsing agents, composition malodor control agents, composition coloring agents, pH buffers, waterproofing agents, soil repellency agents, and mixtures thereof.

19. A system for removing water from a lipophilic fluid and water emulsion, said system comprising exposing said emulsion to an absorbent matrix comprising an absorbent material in order to effect the removal of said water from said lipophilic fluid and water emulsion such that the lipophilic fluid is recovered as collected lipophilic fluid.
20. A system according to Claim 19 further comprising exposing a fabric to a lipophilic fluid and water and recovering said lipophilic fluid and said water in the form of said lipophilic fluid and water emulsion.
21. A system according to Claim 19 wherein said absorbent material comprises a polymer selected from the group consisting of surface cross-linked polyacrylate, surface cross-linked polyacrylamide, and combinations thereof.
22. A system according to Claim 19 wherein said absorbent matrix comprises a spacer material selected from the group consisting essentially of sand, silica, aluminosilicates, glass microspheres, clay, layered silicates, wood, natural textile materials, synthetic textile materials, alumina, aluminum oxide, aluminum silicate, zinc oxide, molecular sieves, zeolites, activated carbon, diatomaceous earth, hydrated silica, mica, microcrystalline cellulose, montmorillonite, peach pit powder, pecan shell powder, talc, tin oxide, titanium dioxide, walnut shell powder, particles of different metals or metal alloys, and mixtures thereof.
23. A system according to Claim 22 wherein said spacer material is selected from the group consisting essentially of particles made from polybutylene, polyethylene, polyisobutylene, polymethylstyrene, polypropylene, polystyrene, polyurethane, nylon, teflon, and mixtures thereof.

24. A system according to Claim 19 further comprising the step of passing said lipophilic fluid and water emulsion through a particulate matter filter such that particles and particle aggregates about 1 micron or larger are removed.
25. A system according to Claim 19 wherein said absorbent matrix is in a form selected from the group consisting of a porous woven sheet impregnated with absorbent polymers, a film or membrane, and combinations thereof.
26. A composition comprising a lipophilic fluid, water, emulsifier, and an absorbent matrix comprising an absorbent material.
27. A composition according to Claim 26 wherein said absorbent material comprises a polymer selected from the group consisting of surface cross-linked polyacrylate, surface cross-linked polyacrylamide, and combinations thereof.
28. A composition according to Claim 26 wherein said absorbent matrix comprises a spacer material selected from the group consisting essentially of sand, silica, aluminosilicates, glass microspheres, clay, layered silicates, wood, natural textile materials, synthetic textile materials, alumina, aluminum oxide, aluminum silicate, zinc oxide, molecular sieves, zeolites, activated carbon, diatomaceous earth, hydrated silica, mica, microcrystalline cellulose, montmorillonite, peach pit powder, pecan shell powder, talc, tin oxide, titanium dioxide, walnut shell powder, particles of different metals or metal alloys, and mixtures thereof.
29. A composition according to Claim 28 wherein said spacer material is selected from the group consisting essentially of particles made from polybutylene, polyethylene, polyisobutylene, polymethylstyrene, polypropylene, polystyrene, polyurethane, nylon, teflon, and mixtures thereof.

30. A composition according to Claim 26 wherein said composition also comprises adjunct ingredients selected from the group consisting essentially of enzymes, bleaches, surfactants, fabric softeners, perfumes, antibacterial agents, antistatic agents, brighteners, dye fixatives, dye abrasion inhibitors, anti-crocking agents, wrinkle reduction agents, wrinkle resistance agents, soil release polymers, sunscreen agents, anti-fade agents, builders, sudsing agents, composition malodor control agents, composition coloring agents, pH buffers, waterproofing agents, soil repellency agents, and mixtures thereof.